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Appendix A. SAFIR Team X Report

Appendix B. SAFIR Sensitivity

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The information contained in this report/CD/etc.  
may be subject to Export or ITAR regulations.

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The Vision Mission study effort for SAFIR had substantial overlap (both in subjects and team members) with that for SPECS, as SAFIR is understood to have an important precursor role for that much more ambitious mission.

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# Compliance Matrix

In the development of this study report we have, for reasons of organizational clarity for this particular mission, departed from the recommended outline. All required elements of the mission description are covered in our report, and the following compliance matrix provides pointers from the recommended template to the sections in the final document where relevant information is presented.

## 1. Science Rationale

- a. key objectives ..... I, II, III
- b. relation to NASA and OSS strategic plans ..... IV
- c. uniqueness or scientific advantages of the proposed approach compared to alternatives ..... V

## 2. Architecture and Implementation Approach

- a. space systems architecture ..... VI, VII
- b. science instrumentation ..... VIII
- c. infrastructure and constraints assumed in place
  - for the time of implementation ..... IX
- d. role of humans ..... XIV

## 3. Technology

- a. unique requirements, their priority and sensitivity of the design to each ..... XV
- b. key technology risks and uncertainties, quantified where possible ..... XV
- c. development roadmap, with alternative approaches where applicable ..... XV
- d. validation and or demonstration approach ..... IX, XII

## 4. Deployment

- a. transportation to operational location ..... X
- b. assembly (if applicable) or deployment ..... VI, XIV

## 5. Operations

- a. space segment ..... XI
- b. communications ..... XI
- c. ground segment ..... XI

## 6. Operations Assurance

- a. system resilience
  - (e.g. redundancy or adaptability) ..... XII
- b. maintenance or servicing (if applicable) ..... XIV

## 7. Safety

- a. launch and near-Earth operation ..... XIII
- b. planetary protection ..... (n/a)
- c. end of mission safety issues (if applicable) ..... (n/a)